

Applicant: Shults, et al.
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positioned more distal to said housing than said bioprotective membrane.

6. The biological fluid measuring device of Claim 1, further comprising c) a member for securing said device to biological tissue, and securing member associated with said housing.

7. The biological fluid measuring device of Claim 6, wherein said securing member comprises poly(ethylene terephthalate).

8. The biological fluid measuring device of Claim 1, wherein said sensor further comprises a member for determining the amount of glucose in a biological sample.

9. The biological fluid measuring device of Claim 8, wherein said glucose determining member comprises a membrane containing glucose oxidase, said glucose oxidase-containing membrane positioned more proximal to said housing than said bioprotective membrane.

10. The biological fluid measuring device of Claim 1, wherein said housing further comprises an apparatus operatively connected to said electronic circuit for transmitting data to a location external to said device.

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Please renumber Claims 1-15 filed with the subject continuation application as claims 28-42.

Please add the following new claims 43-50.

- NE.
43. An implantable glucose monitoring device, comprising:
a housing adapted for implantation into a host; and
a sensor supported by said housing for communication with tissue of said host, said sensor comprising (i) a member for determining the amount of glucose in biological fluid of said host, and (ii) a bioprotective member disposed more distal to said housing than said glucose determining member and including a bioprotective membrane that is substantially impermeable to macrophages and permeable to glucose and oxygen.
44. An implantable glucose monitoring device of Claim 43, wherein said bioprotective membrane comprises pores, said pores having diameters ranging from about 0.1 micron to about 1.0 micron.
45. An implantable glucose monitoring device of Claim 43, wherein said bioprotective membrane comprises polytetrafluoroethylene.

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46. An implantable glucose monitoring device of claim 43, further comprising a member for securing said device to biological tissue of said host, said securing member cooperatively associated with said housing.

47. An implantable glucose monitoring device of Claim 43, wherein said securing member comprises poly(ethylene terephthalate).

48. An implantable glucose monitoring device of Claim 43, wherein said glucose determining member comprises a membrane containing glucose oxidase, said glucose oxidase-containing membrane positioned more proximal to said housing than said bioprotective member.

49. An implantable glucose monitoring device of Claim 43, wherein said device further comprises at least two electrodes supported by said housing and operably connected to said sensor.

50. An implantable glucose monitoring device of Claim 49, wherein said device further comprises electronic circuitry operably connected to at least one of said electrodes and adapted for continuous, long-term operation.